

ABSTRACT

The present invention relates to a method and combination therapy useful in the treatment of cancer. More specifically, the invention relates to the use of COX-2 inhibitors in combination with a therapeutic dendritic cell vaccine for treating cancer. The COX-2 inhibitors of the present invention are believed to inhibit the enzymatic activity of prostaglandinE₂ (PGE₂); thereby preventing COX-2 overexpressing tumors from evading immune surveillance by antigen-specific cytotoxic T lymphocytes (CTLs). COX-2 inhibitors are believed to suppress PGE₂ that COX-2 overexpressing glioma produce, allowing tumor-infiltrating DCs to polarize Th cells toward Th-subset-1 (Th1).